

Title (en)  
Ultrasound application device

Title (de)  
Ultraschallanwendungsvorrichtung

Title (fr)  
Dispositif d'application à ultrasons

Publication  
**EP 2366430 A1 20110921 (EN)**

Application  
**EP 10157051 A 20100319**

Priority  
EP 10157051 A 20100319

Abstract (en)  
A high power ultrasound application device (1) is provided which comprises a hand-held applicator (3). The applicator comprises a converter element (5) for converting electric signals into ultrasound waves; a treatment head (6) configured to apply ultrasound waves from the converter element to a subject to be treated; a handle (8) for holding and manipulating the applicator; and an oscillator circuit (9) arranged in the applicator and comprising one or more electronic components (10A, 10B) configured to be energized by a power source and to generate an output signal to drive the converter element. The oscillator circuit is in thermal contact with the handle, and the handle comprises a heat conductivity and thermal coefficient such that, when manually held by an operator in normal use, a heat conductive channel is provided between at least a portion of the circuit and the operator.

IPC 8 full level  
**A61N 7/00** (2006.01)

CPC (source: EP US)  
**A61B 8/546** (2013.01 - EP US); **A61N 7/00** (2013.01 - EP US); **A61B 2017/00424** (2013.01 - EP US); **A61B 2018/00095** (2013.01 - EP US); **A61B 2018/00101** (2013.01 - EP US); **A61N 1/322** (2013.01 - EP US); **A61N 2007/0073** (2013.01 - EP US)

Citation (applicant)  
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• US 2004171970 A1 20040902 - SCHLEUNIGER KURT [CH], et al  
• DE 4015686 A1 19911121 - MERZ METALL & KUNSTSTOFF [DE]  
• DE 19624163 A1 19980129 - GESTRON VERSAND GMBH MEDIZIN U [DE]  
• WO 2004110558 A1 20041223 - MATSUSHITA ELECTRIC WORKS LTD [JP], et al

Citation (search report)  
• [XY] DE 19624163 A1 19980129 - GESTRON VERSAND GMBH MEDIZIN U [DE]  
• [X] WO 2004110558 A1 20041223 - MATSUSHITA ELECTRIC WORKS LTD [JP], et al  
• [Y] EP 0693262 A1 19960124 - TRAINER JOSEF [AT]  
• [A] WO 9932042 A1 19990701 - TEAM MEDICAL LLC [US]

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Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)  
AL BA ME RS

DOCDB simple family (publication)  
**EP 2366430 A1 20110921**; **EP 2366430 B1 20160106**; ES 2563313 T3 20160314; US 2011230794 A1 20110922; US 8617077 B2 20131231

DOCDB simple family (application)  
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